

ERRATA SHEET

WASTE DISCHARGE REQUIREMENTS: SAN ELIJO JOINT POWERS AUTHORITY, SAN
ELIJO WATER RECLAMATION FACILITY, DISCHARGE TO THE PACIFIC OCEAN VIA
THE SAN ELIJO OCEAN OUTFALL, SAN DIEGO COUNTY
TENTATIVE ORDER NO. R9-2005-0100, NPDES PERMIT NO. CA0107999

Each of the following changes has been made to Tentative Order No. R9-2005-0100; NPDES No. CA0107999, in response to comments received to date. The changes/corrections are shown below in bold and underline/~~strikeout~~ format to indicate added and removed language, respectively.

1. The dates in Table 3. Administrative Information on page 1 have been corrected:

This Order was adopted by the Regional Water Board on:	<u>June 8, 2005</u> May 11
This Order shall become effective on:	<u>June 8, 2005</u> May 11
This Order shall expire on:	<u>June 8, 2005</u> May 11
The U.S. Environmental Protection Agency (U.S. EPA) and the Regional Water Board have classified this discharge as a major discharge.	
The Discharger shall file a Report of Waste Discharge in accordance with Title 23, California Code of Regulations, not later than 180 days in advance of the Order expiration date as application for issuance of new waste discharge requirements.	

2. The date in the certification/adoption statement on page 1 has been changed:

I, John H. Robertus, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Diego Region, on June 8 ~~May 11~~, 2005.

3. Section VII.L *Toxicity Reduction Evaluation (TRE)* in the Table of Contents on page 2 has been deleted and the subsequent sections renumbered accordingly.

4. The following has been added to *List of Attachments* on page 3:

Attachment G – Dilution Model Summary..... **G-1**

5. The following correction to Section II.B *Facility Description* on page 4 has been made:

Attachment B provides a ~~topographic~~ map of the area around the Facility.

6. The following correction to Section II.D *Rationale for Requirements* on page 5 has been made:

Attachments **F and G** ~~A through F~~, which contain background information and rationale for Order requirements, are hereby incorporated into this Order and, ~~thus~~, constitute part of the Findings for this Order.

7. The following correction to Section II.H *Water Quality Control Plans* on page 6 has been made:

The State Water Board adopted a *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California* (Thermal Plan) on May 18, 1972, and amended ~~it this plan~~ on September 18, 1975. The Thermal plan contains temperature objectives for coastal waters.

7. The following addition to Section III *Discharge Prohibitions* on page 9 has been made:

G. Compliance with Discharge Prohibitions contained in Section III.H of the Ocean Plan is a requirement of this Order.

8. The following table replaces Table 7. Effluent Limitations in Section B *Effluent Limitations* on page 10:

Constituent	Units	Effluent Limitations					
		Max Daily	Avg Monthly	Avg Weekly	Instantaneous		6 Month Median
					Min	Max	
CBOD 5-day 20°C	mg/l		25	40			
	lbs/day		1,100	1,800			
	%	The average monthly percent removal shall not be less than 85 percent.					
Total Suspended Solids	mg/l		30	45			
	lbs/day		1,300	2,000			
	%	The average monthly percent removal shall not be less than 85 percent.					
pH	Standard units				6.0	9.0	
Oil and Grease	mg/l		25	40		75	
	lbs/day		1,100	1,800		3,300	
Settleable Solids	ml/l		1.0	1.5		3.0	
Turbidity	NTU		75	100		225	
Acrolein	ug/l		52,000				
	lbs/day		2,300				
Antimony	ug/l		290,000				
	lbs/day		13,000				
Bis (2-chloroethoxy) methane	ug/l		1,000				
	lbs/day		46				
Bis (2-chloroisopropyl) ether	ug/l		290,000				
	lbs/day		12,000				
Chlorobenzene	ug/l		140,000				
	lbs/day		5,900				
Chromium (III)	ug/l		45,000,000				
	lbs/day		2,000,000				
Di-n-butyl Phthalate	ug/l		830,000				

Constituent	Units	Effluent Limitations					
		Max Daily	Avg Monthly	Avg Weekly	Instantaneous		6 Month Median
					Min	Max	
	lbs/day		36,000				
Dichlorobenzenes ¹	ug/l		1,200,000				
	lbs/day		53,000				
Diethyl Phthalate	ug/l		7,900,000				
	lbs/day		340,000				
Dimethyl Phthalate	ug/l		200,000,000				
	lbs/day		8,500,000				
4,6-Dinitro-2-methylphenol	ug/l		52,000				
	lbs/day		2,300				
2,4-Dinitrophenol	ug/l		9,500				
	lbs/day		420				
Ethylbenzene	ug/l		980,000				
	lbs/day		43,000				
Fluoranthene	ug/l		3,600				
	lbs/day		160				
Hexachlorocyclopentadiene	ug/l		14,000				
	lbs/day		600				
Nitrobenzene	ug/l		1,200				
	lbs/day		51				
Thallium	ug/l		480				
	lbs/day		21				
Toluene	ug/l		20,000,000				
	lbs/day		890,000				
Tributyltin	ug/l		0.33				
	lbs/day		0.015				
1,1,1-Trichloroethane	ug/l		130,000,000				
	lbs/day		5,600,000				
Acrylonitrile	ug/l		24				
	lbs/day		1.0				
Aldrin	ug/l		0.0052				
	lbs/day		0.00023				
Benzene	ug/l		1,400				
	lbs/day		61				
Benzidine	ug/l		0.016				
	lbs/day		0.00072				
Beryllium	ug/l		7.9				
	lbs/day		0.34				
Bis (2-chloroethyl) ether	ug/l		11				
	lbs/day		0.47				
Bis (2-ethylhexyl) phthalate	ug/l		830				
	lbs/day		36				
Carbon Tetrachloride	ug/l		210				
	lbs/day		9.4				
Chlordane ²	ug/l		0.0055				
	lbs/day		0.00024				
Chloroform	ug/l		31,000				

Constituent	Units	Effluent Limitations					
		Max Daily	Avg Monthly	Avg Weekly	Instantaneous		6 Month Median
					Min	Max	
	lbs/day		1,400				
DDT ³	ug/l		0.040				
	lbs/day		0.00018				
1,4-Dichlorobenzene	ug/l		4,300				
	lbs/day		190				
3,3'-Dichlorobenzidine	ug/l		1.9				
	lbs/day		0.084				
1,2-Dichloroethane	ug/l		6,700				
	lbs/day		290				
1,1-Dichloroethylene	ug/l		210				
	lbs/day		9.4				
Dichloromethane	ug/l		110,000				
	lbs/day		4,700				
1,3-Dichloropropene	ug/l		2,100				
	lbs/day		93				
Dieldrin	ug/l		0.0095				
	lbs/day		0.00042				
2,4-Dinitrotoluene	ug/l		620				
	lbs/day		27				
1,2-Diphenylhydrazine	ug/l		38				
	lbs/day		1.7				
Halomethanes ⁴	ug/l		31,000				
	lbs/day		1,400				
Heptachlor	ug/l		0.012				
	lbs/day		0.00052				
Hexachlorobenzene	ug/l		0.050				
	lbs/day		0.0022				
Hexachlorobutadiene	ug/l		3,300				
	lbs/day		150				
Hexachloroethane	ug/l		600				
	lbs/day		26				
Isophorone	ug/l		170,000				
	lbs/day		7,600				
N-Nitrosodimethylamine	ug/l		1,700				
	lbs/day		76				
N-Nirtosodiphenylamine	ug/l		600				
	lbs/day		26				
PAHs ⁵	ug/l		2.1				
	lbs/day		0.092				
PCBs ⁶	ug/l		0.0045				
	lbs/day		0.00020				
TCDD Equivalents ⁷	ug/l		0.00000093				
	lbs/day		0.000000041				
1,1,2,2-Tetrachloroethane	ug/l		550				
	lbs/day		24				
Tetrachloroethylene	ug/l		480				

Constituent	Units	Effluent Limitations					
		Max Daily	Avg Monthly	Avg Weekly	Instantaneous		6 Month Median
					Min	Max	
	lbs/day		21				
Toxaphene	ug/l		0.050				
	lbs/day		0.0022				
Trichloroethylene	ug/l		6,400				
	lbs/day		280				
1,1,2-Trichloroethane	ug/l		2,200				
	lbs/day		98				
2,4,6-Trichlorophenol	ug/l		69				
	lbs/day		3.0				
Vinyl Chloride	ug/l		8,600				
	lbs/day		380				

9. The following table replaces Table 8. Performance Goals in Section B *Effluent Limitations* on page 11:

Constituent	Units	Performance Goals					
		Max Daily	Avg Monthly	Avg Weekly	Instantaneous		6 Month Median
					Min	Max	
Arsenic	ug/l	6,900				18,000	1,200
	lbs/day	300				800	52
Cadmium	ug/l	950				2,400	240
	lbs/day	42				100	10
Chromium (Hexavalent) ⁸	ug/l	1,900				4,800	480
	lbs/day	83				210	21
Copper	ug/l	2,400				6,700	240
	lbs/day	100				290	11
Lead	ug/l	1,900				4,800	480
	lbs/day	83				210	21
Mercury	ug/l	38				95	9.4
	lbs/day	1.7				4.2	0.41
Nickel	ug/l	4,800				12,000	1,200
	lbs/day	210				520	52
Selenium	ug/l	14,000				36,000	3,600
	lbs/day	630				1,600	160
Silver	ug/l	630				1,600	130
	lbs/day	28				71	5.6
Zinc	ug/l	17,000				46,000	2,900
	lbs/day	750				2,000	130
Cyanide ⁹	ug/l	950				2,400	240
	lbs/day	42				100	10
Total Residual Chlorine ¹⁰	ug/l	1,900				14,000	480
	lbs/day	83				630	21
Chronic Toxicity ¹¹	TUc	238					
Ammonia (as N)	mg/l	570				1,400	140

Constituent	Units	Performance Goals				
		Max Daily	Avg Monthly	Avg Weekly	Instantaneous	
					Min	Max
	lbs/day	25,000				63,000
Phenolic Compounds (non-chlorinated)	ug/l	29,000				71,000
	lbs/day	1,300				3,100
Chlorinated Phenolics	ug/l	950				2,400
	lbs/day	42				100
Chlorodibromomethane	ug/l		2,000			
	lbs/day		90			
Dichlorobromomethane	ug/l		1,500			
	lbs/day		65			
Endosulfan	ug/l	4.3				6.4
	lbs/day	0.19				0.28
Endrin	ug/l	0.95				1.4
	lbs/day	0.042				0.063
HCH ¹²	ug/l	1.9				2.9
	lbs/day	0.083				0.13
Heptachlor Epoxide	ug/l		0.0048			
	lbs/day		0.00021			
N-Nitrosodi-N-Propylamine	ug/l		90			
	lbs/day		4.0			
Radioactivity ¹³	-	Not to exceed limits specified in Title 17 California Code of Regulations Section 30253, Standards for Protection Against Radiation				
	-					

10. The date in Section VI.A.2.g of Standard Provisions on page 18 has been changed as follows:

This Order expires on **June 8 May 11**, 2010, after which, the terms and conditions of this permit are automatically continued pending issuance of a new permit, provided that all requirements of USEPA's NPDES regulations at 40 CFR 122.6 and the State's regulations at CCR Title 23, Section 2235.4 regarding the continuation of expired permits and waste discharge requirements are met.

11. The following change has been made to Section VI.C.2.c.1) *Spill Prevention and Response Plans* on page 21:

For purposes of this section, a spill is a discharge of treated or untreated wastewater that occurs at or downstream of the Facility headworks in violation of Discharge Prohibition A of this Order, or a discharge of other materials related to treatment and operations of the Facility that occurs anywhere throughout the ~~collection and~~ treatment system owned and/or operated by the Discharger.

12. The following changes have been made to Section VI.C.2.f.1) *Pretreatment Program* of Standard Provisions on page 24:

The Discharger shall conduct ~~an a semi-annual~~ Industrial Waste Survey (IWS) of all the Industrial Users (IUs) in the service area of the Facility in order to determine whether any IUs are subject to pretreatment standards specified in 40 CFR 403. The Discharger shall also perform a ~~semi-annual~~ priority pollutant scan of treated effluent from the Facility. ~~The IWS and priority pollutant monitoring is required during the 12-month period beginning November 1, 2008 through October 31, 2009.~~ Based on results of the IWS, the priority pollutant scan, and the requirements of 40 CFR 403, the Discharger shall submit a ~~semi-annual~~ certification report indicating whether the treatment facility receives pollutants from any IU that would require the Discharger to establish a pretreatment program in accordance with 40 CFR 403. ~~Semi-annual certification reports~~ ~~The certification report,~~ along with results of the IWS and priority pollutant monitoring, shall be submitted to the Regional Water Board by ~~December 10, 2009 no later than February 1 and August 1 of each year.~~ If the Discharger becomes aware of an IU in the service area of the Facility, which would require development of a pretreatment program pursuant to 40 CFR 403, the Discharger shall notify the Regional Water Board and request a modification of this Order to include pretreatment program requirements. In such circumstances the Discharger shall develop and implement a pretreatment program in accordance with the requirements of CWA Sections 307 (b) and (c) and 402 (b) (8) and 40 CFR 403. The Discharger shall assure compliance with applicable federal and local pretreatment standards by the IUs within the service area of the Facility.

13. Section VI.C.2.g *Urban Runoff Diversion Program* of Standard Provisions on page 25 has been deleted.
14. A new Section VI.C.2.g has been inserted on page 25: *Toxicity Reduction Evaluation (TRE)*. The language was previously Section VII.L *Toxicity Reduction Evaluation (TRE)* on page 30.
15. All references to U.S. EPA in the Order and attachments have been changed to USEPA.
16. All references to the Monitoring and Reporting Program in the Order and attachments as having an Order number (e.g. MRP R9-2005-0100) has been changed as follows:

~~the MRP (Attachment E) R9-2005-0100~~

17. The following in Section VII.K Chronic Toxicity on pages 29-30 has been deleted and inserted at the end of Section V *Whole Effluent Toxicity Testing Requirements* on page E-8 with:

~~If the toxicity testing result shows an exceedance of the chronic toxicity limitation identified in the performance goals for Outfall 001 (Section IV.B.2 of this Order), the Discharger shall:~~

~~1. Take all reasonable measures necessary to immediately minimize toxicity; and~~

~~2. Increase the frequency of the toxicity test(s) that showed a violation to at least two times per month until the results of at least two consecutive toxicity tests do not show violations.~~

~~If the Executive Order determines that toxicity testing shows consistent violation or exceedance of any acute or chronic toxicity limitation or performance goal identified in Section IV.B.2 of this Order, the Discharger shall conduct a Toxicity Reduction Evaluation (TRE) that includes all reasonable steps to identify the source of toxicity. Once the source of toxicity is identified, the Discharger shall take all reasonable steps to reduce the toxicity to meet the toxicity limitations identified in the final effluent limitations for Outfall 001 (Section IV.B.2 of this Order).~~

18. Section VII.L *Toxicity Reduction Evaluation (TRE)* on page 30 has been deleted and the subsequent sections renumbered accordingly. The language has been moved to Section VI.C.2 as subsection g.

19. The following correction to Endnote No. 8 on page 33 has been made:

Dischargers may, at their option, meet this performance goal ~~limitation~~ as a total chromium performance goal ~~limitation~~.

20. The following correction to the dilution factor in Endnote No. 10 on page 34 has been made:

The water quality objectives for total chlorine residual applicable to intermittent discharges not exceeding two hours, shall be determined through the use of the following equation: $\log y = -0.43 (\log x) + 1.8$, where y = the water quality objective (in ug/l) to apply when chlorine is being discharged; x = the duration of uninterrupted chlorine discharge in minutes. Actual effluent limitations for total chlorine, when discharging intermittently, shall then be determined according to *Implementation Procedures for Table B* from the Ocean Plan (2001), using a minimum probable initial dilution factor of 237 ~~229~~ and a flow rate of 5.25 MGD.

21. The following change to Section V.E.2.c on page D-8 of Attachment D has been made:

Violation of a maximum daily discharge limitation for any of the pollutants that are identified ~~listed~~ in this Order to be reported within 24 hours [40 CFR §122.41(l)(6)(ii)(C)].

22. Section VII.A *Non-Municipal Facilities* on page D-11 of Attachment D has been deleted and the following sub sections in Section VII have been renumbered.

23. Sections VI.I and VI.J of the Monitoring and Reporting Program (Attachment E) Table of Contents on page E-1 have been deleted.

24. The following changes to Attachment E, *List of Tables* on page E-1 has been made: new Tables 7 and 9 have been inserted; Tables 6 and 8 (previously Table 7) have been renamed; and the tables renumbered accordingly.

Table 1. Monitoring Station Locations	3
Table 2. Influent Monitoring	4
Table 3. Effluent Monitoring	4
Table 4. Whole Effluent Toxicity Testing	7
Table 5. Approved Tests For Chronic Toxicity	7
<u>Table 6. Near Shore Water Quality Reduced Monitoring Requirements</u>	<u>9</u>
<u>Table 7. Near Shore Water Quality Intensive Monitoring Requirements</u>	<u>9</u>
<u>Table 8. Off Shore Water Quality Reduced Monitoring Requirements</u>	<u>9</u>
<u>Table 9. Off Shore Water Quality Intensive Monitoring Requirements</u>	<u>9</u>
<u>Table 10. Sediment Monitoring Requirements</u>	<u>10</u>
<u>Table 11. Infauna Monitoring Requirements</u>	<u>11</u>
<u>Table 12. Demersal Fish and Macroinvertebrates Monitoring Requirements</u>	<u>11</u>
<u>Table 13. Reporting Schedule</u>	<u>14</u>

25. The following corrections to surf zone monitoring stations in Table 1. Monitoring Station Locations in Section II *Monitoring Locations* on page E-3 of Attachment E have been made: S6 has been made historical and S8 has been created.

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
		- Receiving Water Monitoring Stations -
		- Surf Zone Monitoring Stations -
	S6	Surf Zone; 2,200 ft north of the outfall (<u>historical</u>)
	<u>S8</u>	<u>Surf Zone; 8,000 ft north of the outfall</u>

26. The following table replaces Table 3. Effluent Monitoring in Section IV *Effluent Monitoring Requirements* on pages E-5 through E-7 of Attachment E:

Parameter	Units	Sample Type ¹	Minimum Sampling Frequency
Flow	MGD	recorder / totalizer	continuous
CBOD ₅	mg/L	24 hr composite	daily ²
BOD ₅	mg/L	24 hr composite	monthly
TSS	mg/L	24 hr composite	daily ²
pH	pH Units	grab	daily ²
Oil and Grease	mg/L	grab	monthly ³
Settleable Solids	mL/L	grab	daily ²
Turbidity	NTU	24 hr composite	weekly ³
Dissolved Oxygen	mg/L	grab	weekly

Parameter	Units	Sample Type ¹	Minimum Sampling Frequency
Temperature	° F	grab	weekly
Total Residual Chlorine	µg/L	grab	daily ⁷
arsenic	µg/L	24 hr composite	semiannually ^{3, 4}
cadmium	µg/L	24 hr composite	semiannually ^{3, 4}
chromium (VI)	µg/L	24 hr composite	semiannually ^{3, 4, 6}
copper	µg/L	24 hr composite	semiannually ^{3, 4}
lead	µg/L	24 hr composite	semiannually ^{3, 4}
mercury	µg/L	24 hr composite	semiannually ^{3, 4}
nickel	µg/L	24 hr composite	semiannually ^{3, 4}
selenium	µg/L	24 hr composite	semiannually ^{3, 4}
silver	µg/L	24 hr composite	semiannually ^{3, 4}
zinc	µg/L	24 hr composite	semiannually ^{3, 4}
cyanide	µg/L	24 hr composite	semiannually ^{3, 4}
ammonia	mg/L	24 hr composite	monthly ³
non-chlorinated phenolic compounds	µg/L	grab	semiannually ^{3, 4}
chlorinated phenolics	µg/L	grab	semiannually ³
endosulfan	µg/L	grab	semiannually ³
endrin	µg/L	grab	semiannually ³
HCH	µg/L	grab	semiannually ^{3, 4}
radioactivity	pCi/L	24 hr composite	semiannually ³
acrolein	µg/L	grab	annually ³
antimony	µg/L	24 hr composite	annually ³
bis (2-chloroethoxy) methane	µg/L	grab	annually ³
bis (2-chloroisopropyl) ether	µg/L	grab	annually ³
chlorobenzene	µg/L	grab	annually ³
chromium (trivalent)	µg/L	24 hr composite	annually ³
di-n-butyl phthalate	µg/L	grab	annually ³
dichlorobenzenes	µg/L	grab	annually ³
diethyl phthalate	µg/L	grab	annually ³
dimethyl phthalate	µg/L	grab	annually ³
4,6-dinitro-2-methylphenol	µg/L	grab	annually ³
2,4-dinitrophenol	µg/L	grab	annually ³
ethylbenzene	µg/L	grab	annually ³
fluoranthene	µg/L	grab	annually ³
hexachlorocyclopentadiene	µg/L	grab	annually ³
nitrobenzene	µg/L	grab	annually ³
thallium	µg/L	24 hr composite	annually ³
toluene	µg/L	grab	annually ³
1,1,1-trichloroethane	µg/L	grab	annually ³
tributyltin	µg/L	24 hr composite	annually ³

Parameter	Units	Sample Type ¹	Minimum Sampling Frequency
acrylonitrile	µg/L	grab	annually ³
aldrin	µg/L	grab	annually ³
benzene	µg/L	grab	annually ³
benzidine	µg/L	grab	annually ³
beryllium	µg/L	24 hr composite	annually ³
bis (2-chloroethyl) ether	µg/L	grab	annually ³
bis (2-ethylhexyl) phthalate	µg/L	grab	annually ³
carbon tetrachloride	µg/L	grab	annually ³
chlordane	µg/L	grab	annually ³
chlorodibromomethane	µg/L	grab	annually ³
chloroform	µg/L	grab	annually ³
DDT	µg/L	grab	annually ³
1,4-dichlorobenzene	µg/L	grab	annually ³
3,3'-dichlorobenzidine	µg/L	grab	annually ³
1,2-dichloroethane	µg/L	grab	annually ³
1,1-dichloroethylene	µg/L	grab	annually ³
dichlorobromomethane	µg/L	grab	annually ³
dichloromethane	µg/L	grab	annually ³
1,3-dichloropropene	µg/L	grab	annually ³
dieldrin	µg/L	grab	annually ³
2,4-dinitrotoluene	µg/L	grab	annually ³
1,2-diphenylhydrazine	µg/L	grab	annually ³
halomethanes	µg/L	grab	annually ³
heptachlor	µg/L	grab	annually ³
heptachlor epoxide	µg/L	grab	annually ³
hexachlorobenzene	µg/L	grab	annually ³
hexachlorobutadiene	µg/L	grab	annually ³
hexachloroethane	µg/L	grab	annually ³
isophorone	µg/L	grab	annually ³
N-nitrosodimethylamine	µg/L	grab	annually ³
N-nitrosodi-N-propylamine	µg/L	grab	annually ³
N-nitrosodiphenylamine	µg/L	grab	annually ³
PAHs	µg/L	grab	annually ³
PCBs	µg/L	grab	annually ³
TCDD equivalents	µg/L	grab	annually ^{3, 8}
1,1,2,2-tetrachloroethane	µg/L	grab	annually ³
tetrachloroethylene	µg/L	grab	annually ³
toxaphene	µg/L	grab	annually ³
trichloroethylene	µg/L	grab	annually ³
1,1,2-trichloroethane	µg/L	grab	annually ³
2,4,6-trichlorophenol	µg/L	grab	annually ³

Parameter	Units	Sample Type ¹	Minimum Sampling Frequency
vinyl chloride	µg/L	grab	annually ³

27. The following correction to Table 4. Whole Effluent Toxicity Testing in Section V *Whole Effluent Toxicity Testing Requirements* on page E-7 of Attachment E has been made:

Test	Unit	Sample	Minimum Test Frequency
Chronic Toxicity	TU _c	24 hr composite	monthly quarterly

28. The following correction has been made to Section V *Whole Effluent Toxicity Testing Requirements* on page E-7 of Attachment E:

After the screening period, the most sensitive test species shall be used for the ~~monthly~~ **quarterly** testing.

29. The following (previously part of Section VII.K *Chronic Toxicity* on pages 29-30) has been added to Section V *Whole Effluent Toxicity Testing Requirements* on pages E-7 and E-8 of Attachment E:

If the toxicity testing result shows an exceedance of the chronic toxicity performance goal identified in the performance goals for Outfall 001 (Section IV.B.2 of this Order), the Discharger shall:

- a. Take all reasonable measures necessary to immediately minimize toxicity; and**
- b. Increase the frequency of the toxicity test(s) that showed a violation to at least two times per month until the results of at least two consecutive toxicity tests do not show violations.**

If the Executive Order determines that toxicity testing shows consistent violation or exceedance of the chronic toxicity performance goal identified in Section IV.B.2 of this Order, the Discharger shall conduct a Toxicity Reduction Evaluation (TRE) that includes all reasonable steps to identify the source of toxicity. Once the source of toxicity is identified, the Discharger shall take all reasonable steps to reduce the toxicity to meet the toxicity performance goal identified in Section IV.B.2 of this Order.

30. The following has been added to Section VI.A.1 *Surf Zone Water Quality Monitoring* on page E-9 of Attachment E:

Grab samples shall be collected and analyzed for total and fecal coliform and enterococcus bacteria at a minimum frequency of one time per week **from May 1 through October 31,**

and at a minimum frequency of once every other week from November 1 through April 30 of each year.⁵

31. Section VI.A.3 *Surf Zone Water Quality Monitoring* on page E-9 of Attachment E has been deleted.

32. The following has replaced Section VI.B *Near Shore Water Quality Monitoring* on page E-9 of Attachment E:

1. Reduced Monitoring

If the Executive Officer determines that the effluent at all times complies with Section IV.B Effluent Limitations and Performance Goals of Order No. R9-2005-0100, only reduced near shore water quality monitoring specified below is required.

Table 6. Near Shore Water Quality Reduced Monitoring Requirements

<u>Determination</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Minimum Frequency</u>
<u>Visual Observations</u>	<u>=</u>	<u>=</u>	<u>monthly</u>
<u>Total and Fecal Coliform</u>	<u>number / 100 ml</u>	<u>grab</u> ⁹	<u>monthly</u>
<u>Enterococcus</u> ⁵	<u>number / 100 ml</u>	<u>grab</u> ⁹	<u>monthly</u>

2. Intensive Monitoring

The intensive near shore water quality monitoring specified below is required during the 12-month period beginning November 1, 2008 through October 31, 2009, and must be submitted by December 10, 2009. This monitoring data will assist Regional board staff in the evaluation of the Report of Waste Discharge. The intensive near shore water quality monitoring specified below is also required if the Executive Officer determines that the effluent does not at all times comply with Section IV.B Effluent Limitations and Performance Goals of Order No. R9-2005-0100.

Table 7. Near Shore Water Quality Intensive Monitoring Requirements

<u>Determination</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Minimum Frequency</u>
<u>Visual Observations</u>	<u>=</u>	<u>=</u>	<u>monthly</u>
<u>Total and Fecal Coliform</u>	<u>number / 100 ml</u>	<u>grab</u> ¹¹	<u>monthly</u>
<u>Enterococcus</u> ⁵	<u>number / 100 ml</u>	<u>grab</u> ¹¹	<u>monthly</u>

33. The following in Section VI.B *Near Shore Water Quality Monitoring* on page E-9 of Attachment E has been deleted.

~~If a near shore water quality monitoring station consistently exceeds a coliform objective or exceeds a geometric mean enterococcus density of 24 organisms per 100 mL for a thirty day period or 12 organisms per 100 mL for a six month period, the Discharger shall conduct a survey to determine if discharges from the San Elijo Water Reclamation Facility are the source of the contamination. If the survey indicates that elevated coliform and/or enterococcus levels are attributable to discharges from the San Elijo Water Reclamation Facility, the Discharger shall take action to control the source.~~

34. The following changes to Section VI.C *Off Shore Water Quality Monitoring* on page E-10 of Attachment E has been made:

1. Reduced Monitoring

If the Executive Officer determines that the effluent at all times complies with Section IV.B Effluent Limitations and Performance Goals of Order No. R9-2005-0100, only reduced off shore water quality monitoring specified below is required.

Table 7 8. Off Shore Water Quality Reduced Monitoring Requirements

Determination	Units	Type of Sample	Minimum Frequency
Visual Observations	-	-	monthly
Total and Fecal Coliform	number / 100 ml	grab ¹¹	monthly
Enterococcus ⁵	number / 100 ml	grab ¹¹	monthly
Temperature	°F	grab ¹²	monthly
Dissolved Oxygen	mg/L	grab ¹²	monthly
Light Transmittance	percent	instrument ¹²	monthly
pH	pH-units	grab ⁹	monthly

2. Intensive Monitoring

The intensive off shore water quality monitoring specified below is required during the 12-month period beginning November 1, 2008 through October 31, 2009, and must be submitted by December 10, 2009. This monitoring data will assist Regional board staff in the evaluation of the Report of Waste Discharge. The intensive off shore water quality monitoring specified below is also required if the Executive Officer determines that the effluent does not at all times comply with Section IV.B Effluent Limitations and Performance Goals of Order No. R9-2005-0100.

Table 9. Off Shore Water Quality Intensive Monitoring Requirements

Determination	Units	Type of Sample	Minimum Frequency
Visual Observations	-	-	monthly
Total and Fecal Coliform	number / 100 ml	grab ¹¹	monthly

Determination	Units	Type of Sample	Minimum Frequency
Enterococcus ⁵	number / 100 ml	grab ¹¹	monthly
Temperature	° F	grab ¹²	monthly
Dissolved Oxygen	mg/L	grab ¹²	monthly
Light Transmittance	percent	instrument ¹²	monthly
pH	pH units	grab ⁹	monthly

35. The following changes to Section VI.D *Benthic Monitoring* on pages E-10 and E-11 of Attachment E have been made:

~~The monitoring specified below is required for a 12-month period during the first and third years of the Order. The monitoring data will assist Regional Water Board staff in the evaluation of the Report of Waste Discharge, which is required to be submitted by the Discharger within 180 days prior to the Order's expiration date of May 11, 2010. Benthic monitoring shall be conducted at all offshore monitoring stations.~~

The intensive monitoring specified below is required during the 12-month period beginning November 1, 2008 through October 31, 2009, and must be submitted by December 10, 2009. This monitoring data will assist Regional board staff in the evaluation of the Report of Waste Discharge. The sediment monitoring specified below is also required if the Executive Officer determines that the effluent does not at all times comply with Section IV.B Effluent Limitations and Performance Goals of Order No. R9-2005-0100. Benthic monitoring shall be conducted at all off shore monitoring stations.

1. Sediment Characteristics. Analyses shall be performed on the upper two inches of core.

Table 8 10. Sediment Monitoring Requirements

Determination	Units	Type of Sample	Minimum Frequency
Sulfides	mg/kg	core	<u>Semi-annually</u> Years 1 & 3
Total Chlorinated Hydrocarbons	mg/kg	core	<u>Semi-annually</u> Years 1 & 3
BOD ₅	mg/kg	core	<u>Semi-annually</u> Years 1 & 3
COD	mg/kg	core	<u>Semi-annually</u> Years 1 & 3
Particle Size Distribution	mg/kg	core	<u>Semi-annually</u> Years 1 & 3
Arsenic	mg/kg	core	<u>Annually</u> Years 1 & 3
Cadmium	mg/kg	core	<u>Annually</u>

Determination	Units	Type of Sample	Minimum Frequency
			Years 1 & 3
Total Chromium	mg/kg	core	<u>Annually</u> Years 1 & 3
Copper	mg/kg	core	<u>Annually</u> Years 1 & 3
Lead	mg/kg	core	<u>Annually</u> Years 1 & 3
Mercury	mg/kg	core	<u>Annually</u> Years 1 & 3
Nickel	mg/kg	core	<u>Annually</u> Years 1 & 3
Silver	mg/kg	core	<u>Annually</u> Years 1 & 3
Zinc	mg/kg	core	<u>Annually</u> Years 1 & 3
Cyanide	mg/kg	core	<u>Annually</u> Years 1 & 3
Phenolic Compounds	mg/kg	core	<u>Annually</u> Years 1 & 3
Radioactivity	pCi/kg	core	<u>Annually</u> Years 1 & 3

2. Infauna. Samples shall be collected with a Paterson, Smith-McIntyre, or orange-peel type dredge, having an open sampling area of not less than 124 square inches and a sediment capacity of not less than 210 cubic inches. The sediment shall be sifted through a one-millimeter mesh screen and all organisms shall be identified to as low a taxon as possible.

Table 9 11. Infauna Monitoring Requirements

Determination	Units	Minimum Frequency
Benthic Biota	Identification and enumeration	3 grabs <u>semi-annually</u> years 1 & 3

36. The following changes to Section VI.E *Additional Biological Monitoring* on page E-11 of Attachment E have been made:

The intensive monitoring specified below is required during the 12-month period beginning November 1, 2008 through October 31, 2009, and must be submitted by December 10, 2009. This monitoring data will assist Regional board staff in the evaluation of the Report of Waste Discharge. The biological transect monitoring specified below is also required if the Executive Officer determines that the effluent does not at all times comply with Section IV.B Effluent Limitations and Performance Goals of Order No. R9-2005-0100.

~~The monitoring specified below is required during the 12-month period for first and third year of this Order. The monitoring data will assist Regional Water Board staff in the evaluation of the Report of Waste Discharge, which is required to be submitted by the Discharger within 180 days prior to the Order's expiration date of May 11, 2010.~~

Table 10 12. Demersal Fish and Macroinvertebrates Monitoring Requirements

Determination ¹³	Units	Minimum Frequency
Biological Transects	Identification and enumeration	<u>Annually</u> Years 1 & 3

37. The following changes to Section VI.H *Intensive Monitoring* on page E-12 of Attachment E has been made:

The Discharger shall perform the intensive monitoring as described by this MRP ~~for years 1 and 3 of the Order and participate~~ in conjunction with the Southern California Coastal Water Research Project (SCCWRP) Bight Study ~~in year 5 of this Order.~~

The Discharger shall ~~in year 5 of this Order~~ participate and coordinate with state and local agencies and other Dischargers in the San Diego Region in development ~~and implementation~~ of a regional monitoring program (Bight Study) for the Pacific Ocean as directed by this Regional Water Board. The intent of the Bight Study is to maximize the efforts of all monitoring partners using a more cost-effective monitoring design and to best utilize the pooled resources of the region.

38. Section VI.I *Plume Tracking Study* on page E-12 of Attachment E has been deleted.
39. Section VI.J *Urban Runoff Diversions* on page E-13 of Attachment E has been deleted.
40. The following change to Section I.B on page F-3 of Attachment F has been made:

The terms and conditions of the current Order have been automatically continued and remain in effect until new Waste Discharge Requirements and NPDES permit are adopted pursuant to this Order. ~~The terms of the existing Order automatically continued in effect after the permit expiration date.~~

41. The following change to Section II.A *Description of Wastewater and Biosolids Treatment or Controls* on page F-4 of Attachment F has been made:

Extreme rain events were experienced in early 2005. Monthly influent flow averages for January and February 2005 were reported at 3.66 MGD and 3.60 MGD, respectively. ~~During extreme rain events in early 2005, daily effluent flow was reported over 4 MGD for a few days, with a peak flow of almost 5.5 MGD on January 9, 2005.~~

~~Monthly averages for January and February 2005 were reported as 3.6 MGD and 3.4 MGD, respectively.~~

42. The following corrections to Table 4. Toxic Pollutant Monitoring in Section II.C *Summary of Existing Requirements and Self-Monitoring Report (SMR) Data* on page F-6 of Attachment F has been made:

Toxic Pollutant from Table B of the Ocean Plan (1997)	Monitoring Frequency
Total Residual Chlorine	Daily
Metals, Cyanide, Chlorinated and Non-Chlorinated Phenolics, Endosulfan, Endrin, HCH, Radioactivity	Semiannually Quarterly
All other Table B pollutants from the Ocean Plan (1997)	Annually Semi-Annually

43. The following correction to Section III.C.1 *Water Quality Control Plans* on page F-8 of Attachment F has been made:

The State Water Board adopted a *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California* (Thermal Plan) on May 18, 1972, and amended ~~it this plan~~ on September 18, 1975. The Thermal plan contains temperature objectives for coastal waters.

44. The following is inserted as Section III.C.5 *Alaska Rule* on page F-9 of Attachment F:

Alaska Rule. On March 30, 2000, USEPA revised its regulation that specifies when new and revised State and Tribal water quality standards (WQS) become effective for Clean Water Act (CWA) purposes (40 CFR 131.21, 65 FR 24641, April 27, 2000). Under USEPA's new regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.

45. The following is inserted as Section III.C.6 *No More Stringent Than Federal Law* on page F-9 of Attachment F:

No More Stringent Than Federal Law. This Order contains restrictions on individual pollutants that are no more stringent than required by the federal Clean Water Act. Individual pollutant restrictions consist of technology-based restrictions and water quality-based effluent limitations. The technology-based effluent limitations consist of restrictions on carbonaceous biochemical oxygen demand (CBOD₅), total suspended solids (TSS), and hydrogen ion concentration (pH). Restrictions on CBOD₅, TSS, and pH are specified in federal regulations as discussed in Finding F, and the Order's

technology-based pollutant restrictions are no more stringent than required by the Clean Water Act. Water quality-based effluent limitations have been derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that toxic pollutant water quality-based effluent limitations were derived from the Ocean Plan (2001), the Ocean Plan is the applicable standard pursuant to CWA Section 303(c)(1). The scientific procedures for calculating the individual water quality-based effluent limitations are based on the Program of Implementation contained in the California Ocean Plan, which was adopted by the State Water Resources Control Board on November 16, 2000 and approved by USEPA on December 3, 2001. Most beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by USEPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless “applicable water quality standards for purposes of the [Clean Water] Act” pursuant to 40 CFR 131.21(c)(1). The remaining water quality objectives and beneficial uses implemented by this Order (specifically temperature) were adopted in the *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California* (Thermal Plan) on May 18, 1972 and amended on September 18, 1975 and are applicable water quality standards pursuant to 40 CFR 131.21(c)(1). Collectively, this Order’s restrictions on individual pollutants are no more stringent than required to implement the technology-based requirements of the Clean Water Act and the applicable water quality standards for purposes of the Clean Water Act.

46. The following correction to the dilution factor in Section IV.C.3 *Determining the Need for WQBELs* on page F-14 of Attachment F has been made:

A minimum probable initial dilution of 237 ~~229~~:1 was considered in this evaluation.

47. The following correction to the dilution factor in Section IV.C.4 *WQBEL Calculations* on page F-14 of Attachment F has been made:

To develop effluent limitations for the updated facilities where applicable, the Regional Water Board has recalculated the minimum probable initial dilution factor to be 237 ~~229~~ to 1.

48. The following corrections to the WQBEL example calculations in Section IV.C.4 *WQBEL Calculations* on page F-15 of Attachment F has been made:

As examples, WQBELS for copper, chronic toxicity, chloroform, and chlorine ~~arsenic, cyanide, and zinc~~ are determined as follows:

Copper

$$\begin{aligned} Ce &= 3 + \underline{237} \ 229 (3 - 2) = \underline{240} \ 232 \text{ } \mu\text{g/L (6-Month Median)} \\ Ce &= 12 + \underline{237} \ 229 (12 - 2) = \underline{2,382} \ 2,302 \text{ } \mu\text{g/L (Daily Maximum)} \\ Ce &= 30 + \underline{237} \ 229 (30 - 2) = \underline{6,666} \ 6,442 \text{ } \mu\text{g/L (Instantaneous Maximum)} \end{aligned}$$

Chronic Toxicity

$$Ce = 1 + \underline{237} \ 229 (1 - 0) = \underline{238} \ 230 \text{ TUc (Daily Maximum)}$$

Chloroform

$$Ce = 130 + \underline{237} \ 229 (130 - 0) = \underline{30,940} \ 29,900 \text{ } \mu\text{g/L (30-Day Average)}$$

Chlorine

$$\begin{aligned} Ce &= 2 + \underline{237} \ 229 (2 - 0) = \underline{476} \ 460 \text{ } \mu\text{g/L (6-Month Median)} \\ Ce &= 8 + \underline{237} \ 229 (8 - 0) = \underline{1,904} \ 1,840 \text{ } \mu\text{g/L (Daily Maximum)} \\ Ce &= 60 + \underline{237} \ 229 (60 - 0) = \underline{14,280} \ 13,800 \text{ } \mu\text{g/L (Instantaneous Maximum)} \end{aligned}$$

49. The following changes to Table 11 New Toxic Pollutants and Corresponding Limitations in Section IV.C.4.a *WQBEL Calculations* on page F-17 of Attachment F have been made:

Table 11. New Toxic Pollutants and Corresponding Performance Goals ~~Limitations~~

Pollutant	Units	Monthly Average
Chlorodibromomethane	µg/L	2,000
	lbs/day	<u>90</u> 86
Dichlorobromomethane	µg/L	<u>1,500</u> 1,400
	lbs/day	<u>65</u> 62
N-nitrosodi-N-propylamine	µg/L	<u>90</u> 87
	lbs/day	<u>4.0</u> 3.8
Heptachlor epoxide	µg/L	<u>0.0048</u> 0.0046
	lbs/day	<u>0.00021</u> 0.00020

50. The following changes to Table 12. Toxic Pollutant Limitations Based on the 2001 Ocean Plan in Section IV.C.4.b *WQBEL Calculations* on pages F-16 and F-17 of Attachment F have been made:

Pollutant	Units	Monthly Average
1,1-dichloroethylene	µg/L	<u>210</u> 200
	lbs/day	<u>9.4</u> 8.8
Isophorone	µg/L	<u>170,000</u> 160,000
	lbs/day	<u>7,600</u> 7,000
Tetrachloroethylene	µg/L	<u>480</u> 460

Pollutant	Units	Monthly Average
	lbs/day	21 20
Thallium	µg/L	480 460
	lbs/day	22 10
1,1,2,2-tetrachloroethane	µg/L	550 510
	lbs/day	24 22
1,1,2-trichloroethane	µg/L	2,200
	lbs/day	98 95
1,2-dichloroethane	µg/L	6,700 6,400
	lbs/day	290 280
Heptachlor	µg/L	0.012
	lbs/day	0.00052 0.00050

51. The following correction to the chronic toxicity limitation in Section IV.C.5 *Whole Effluent Toxicity (WET)* on page F-17 of Attachment F has been made:

Based on methods of the Ocean Plan (2001), a maximum daily effluent limitation of ~~238~~ **230** TUC for chronic toxicity is required.

52. The following correction to the dilution factor in Section IV.D *Final Effluent Limitations* on page F-17 of Attachment F has been made:

Effluent limitations were determined according to the standards and equations provided in the Ocean Plan (2001). Where Order No. R9-2005-0100 establishes mass emission limitations, these limitations have been derived based on a flow of 5.25 MGD, which is the design treatment capacity of the Facility, and a minimum probable initial dilution factor of ~~237~~ **229**:1.

53. The following table replaces Table 13. Summary of Final Effluent Limitations in Section IV.D *Final Effluent Limitations* on pages F-17 through F-20 of Attachment F:

Constituent	Units	Effluent Limitations					
		Max Daily	Avg Monthly	Avg Weekly	Instantaneous		6 Month Median
CBOD 5-day 20°C	mg/l		25	40			
	lbs/day		1,100	1,800			
	%	The average monthly percent removal shall not be less than 85 percent.					
Total Suspended Solids	mg/l		30	45			
	lbs/day		1,300	2,000			
	%	The average monthly percent removal shall not be less than 85 percent.					
pH	Standard units				6.0	9.0	
Oil and Grease	mg/l		25	40		75	
	lbs/day		1,100	1,800		3,300	
Settleable Solids	ml/l		1.0	1.5		3.0	

Constituent	Units	Effluent Limitations					6 Month Median
		Max Daily	Avg Monthly	Avg Weekly	Instantaneous		
					Min	Max	
Turbidity	NTU		75	100		225	
Acrolein	ug/l		52,000				
	lbs/day		2,300				
Antimony	ug/l		290,000				
	lbs/day		13,000				
Bis (2-chloroethoxy) methane	ug/l		1,000				
	lbs/day		46				
Bis (2-chloroisopropyl) ether	ug/l		290,000				
	lbs/day		12,000				
Chlorobenzene	ug/l		140,000				
	lbs/day		5,900				
Chromium (III)	ug/l		45,000,000				
	lbs/day		2,000,000				
Di-n-butyl Phthalate	ug/l		830,000				
	lbs/day		36,000				
Dichlorobenzenes	ug/l		1,200,000				
	lbs/day		53,000				
Diethyl Phthalate	ug/l		7,900,000				
	lbs/day		340,000				
Dimethyl Phthalate	ug/l		200,000,000				
	lbs/day		8,500,000				
4,6-Dinitro-2-methylphenol	ug/l		52,000				
	lbs/day		2,300				
2,4-Dinitrophenol	ug/l		9,500				
	lbs/day		420				
Ethylbenzene	ug/l		980,000				
	lbs/day		43,000				
Fluoranthene	ug/l		3,600				
	lbs/day		160				
Hexachlorocyclopentadiene	ug/l		14,000				
	lbs/day		600				
Nitrobenzene	ug/l		1,200				
	lbs/day		51				
Thallium	ug/l		480				
	lbs/day		21				
Toluene	ug/l		20,000,000				
	lbs/day		890,000				
Tributyltin	ug/l		0.33				
	lbs/day		0.015				
1,1,1-Trichloroethane	ug/l		130,000,000				
	lbs/day		5,600,000				
Acrylonitrile	ug/l		24				
	lbs/day		1.0				
Aldrin	ug/l		0.0052				
	lbs/day		0.00023				
Benzene	ug/l		1,400				

Constituent	Units	Effluent Limitations					
		Max Daily	Avg Monthly	Avg Weekly	Instantaneous		6 Month Median
					Min	Max	
	lbs/day		61				
Benzidine	ug/l		0.016				
	lbs/day		0.00072				
Beryllium	ug/l		7.9				
	lbs/day		0.34				
Bis (2-chloroethyl) ether	ug/l		11				
	lbs/day		0.47				
Bis (2-ethylhexyl) phthalate	ug/l		830				
	lbs/day		36				
Carbon Tetrachloride	ug/l		210				
	lbs/day		9.4				
Chlordane	ug/l		0.0055				
	lbs/day		0.00024				
Chloroform	ug/l		31,000				
	lbs/day		1,400				
DDT	ug/l		0.040				
	lbs/day		0.00018				
1,4-Dichlorobenzene	ug/l		4,300				
	lbs/day		190				
3,3' -Dichlorobenzidine	ug/l		1.9				
	lbs/day		0.084				
1,2-Dichloroethane	ug/l		6,700				
	lbs/day		290				
1,1-Dichloroethylene	ug/l		210				
	lbs/day		9.4				
Dichloromethane	ug/l		110,000				
	lbs/day		4,700				
1,3-Dichloropropene	ug/l		2,100				
	lbs/day		93				
Dieldrin	ug/l		0.0095				
	lbs/day		0.00042				
2,4-Dinitrotoluene	ug/l		620				
	lbs/day		27				
1,2-Diphenylhydrazine	ug/l		38				
	lbs/day		1.7				
Halomethanes	ug/l		31,000				
	lbs/day		1,400				
Heptachlor	ug/l		0.012				
	lbs/day		0.00052				
Hexachlorobenzene	ug/l		0.050				
	lbs/day		0.0022				
Hexachlorobutadiene	ug/l		3,300				
	lbs/day		150				
Hexachloroethane	ug/l		600				
	lbs/day		26				
Isophorone	ug/l		170,000				

Constituent	Units	Effluent Limitations					
		Max Daily	Avg Monthly	Avg Weekly	Instantaneous		6 Month Median
					Min	Max	
	lbs/day		7,600				
N-Nitrosodimethylamine	ug/l		1,700				
	lbs/day		76				
N-Nirtosodiphenylamine	ug/l		600				
	lbs/day		26				
PAHs	ug/l		2.1				
	lbs/day		0.092				
PCBs	ug/l		0.0045				
	lbs/day		0.00020				
TCDD Equivalents	ug/l		0.00000093				
	lbs/day		0.000000041				
1,1,2,2-Tetrachloroethane	ug/l		550				
	lbs/day		24				
Tetrachloroethylene	ug/l		480				
	lbs/day		21				
Toxaphene	ug/l		0.050				
	lbs/day		0.0022				
Trichloroethylene	ug/l		6,400				
	lbs/day		280				
1,1,2-Trichloroethane	ug/l		2,200				
	lbs/day		98				
2,4,6-Trichlorophenol	ug/l		69				
	lbs/day		3.0				
Vinyl Chloride	ug/l		8,600				
	lbs/day		380				

54. The following correction to the dilution factor in Section IV.E *Performance Goals* on page F-20 of Attachment F has been made:

Performance goals were determined according to the standards and equations provided in the Ocean Plan (2001). Mass emissions have been derived based on a flow of 5.25 MGD, which is the design treatment capacity of the Facility, and a minimum probable initial dilution factor of **237** ~~229~~:1.

55. The following table replaces Table 14. Summary of Performance Goals in Section IV.E *Performance Goals* on page F-21 of Attachment F:

Constituent	Units	Performance Goals					
		Max Daily	Avg Monthly	Avg Weekly	Instantaneous		6 Month Median
					Min	Max	
Arsenic	ug/l	6,900				18,000	1,200
	lbs/day	300				800	52
Cadmium	ug/l	950				2,400	240
	lbs/day	42				100	10

Constituent	Units	Performance Goals					
		Max Daily	Avg Monthly	Avg Weekly	Instantaneous		6 Month Median
					Min	Max	
Chromium (Hexavalent)	ug/l	1,900				4,800	480
	lbs/day	83				210	21
Copper	ug/l	2,400				6,700	240
	lbs/day	100				290	11
Lead	ug/l	1,900				4,800	480
	lbs/day	83				210	21
Mercury	ug/l	38				95	9.4
	lbs/day	1.7				4.2	0.41
Nickel	ug/l	4,800				12,000	1,200
	lbs/day	210				520	52
Selenium	ug/l	14,000				36,000	3,600
	lbs/day	630				1,600	160
Silver	ug/l	630				1,600	130
	lbs/day	28				71	5.6
Zinc	ug/l	17,000				46,000	2,900
	lbs/day	750				2,000	130
Cyanide	ug/l	950				2,400	240
	lbs/day	42				100	10
Total Residual Chlorine	ug/l	1,900				14,000	480
	lbs/day	83				630	21
Chronic Toxicity	TUc	238					
Ammonia (as N)	mg/l	570				1,400	140
	lbs/day	25,000				63,000	6,300
Phenolic Compounds (non-chlorinated)	ug/l	29,000				71,000	7,100
	lbs/day	1,300				3,100	310
Chlorinated Phenolics	ug/l	950				2,400	240
	lbs/day	42				100	10
Chlorodibromomethane	ug/l		2,000				
	lbs/day		90				
Dichlorobromomethane	ug/l		1,500				
	lbs/day		65				
Endosulfan	ug/l	4.3				6.4	2.1
	lbs/day	0.19				0.28	0.094
Endrin	ug/l	0.95				1.4	0.48
	lbs/day	0.042				0.063	0.021
HCH	ug/l	1.9				2.9	0.95
	lbs/day	0.083				0.13	0.042
Heptachlor Epoxide	ug/l		0.0048				
	lbs/day		0.00021				
N-Nitrosodi-N-Propylamine	ug/l		90				
	lbs/day		4.0				
Radioactivity	-	Not to exceed limits specified in Title 17 California Code of Regulations Section 30253, Standards for Protection Against Radiation					
	-						

56. The following replaces Section VI.F.2.a *Recalculation of Ocean Outfall Initial Dilution Factor* on pages F-23 and F-24 of Attachment F:

As discussed elsewhere in this Fact Sheet, it was necessary to recalculate the initial dilution factor, Dm, for this current permit renewal due to an expansion of the City of Escondido's treatment facilities which also discharge through the San Elijo Ocean Outfall (SEOO). The new recalculated Dm of 237, which is based on an SEOO total permitted flow rate of 23.25 MGD, is an increase over the previous permit's Dm of 220 which was based on an SEOO operational total flowrate of 24 MGD. (While the previous Dm was determined using 24 MGD, the total permitted flowrate was previously only 21.75 MGD). The new Dm results in a slight relaxation of effluent limitations in this Order compared to the those in Order No. 99-71 and also reflects an expansion of the zone of initial dilution (ZID), both of which may indicate a lowering of water quality.

The concentration effluent limitations in this Order, recalculated using the new Dm, are approximately 8% higher than the concentration effluent limitations in the previous permit. Because the total permitted flowrate through the SEOO was previously only 21.75 MGD, as provided in the previous NPDES permits for SEJPA and the City of Escondido, the relaxed effluent limitations in this permit combined with the new total permitted flowrate through the SEOO of 23.25 MGD, as provided in the new NPDES permits for SEJPA and the City of Escondido, results in a greater permitted mass emission rate (MER) for a given constituent. The greater MER for a given constituent is expected to result in a lowering of existing water quality for that constituent by an increment approximately equal to 8% of the six-month median water quality objective (WQO) and 12% of the daily maximum and instantaneous WQO. See example calculations considering Arsenic below:

- Arsenic Daily Maximum WQO (Ocean Plan 2001, Table B) = 32 ug/L
- Previous mass emission rate (MER) =
(previous effluent limitation) x (previous permitted total flow rate) =
(6400 ug/L) x (21.75 MGD) x 0.00834 = 1160 lbs/day
- Current MER =
(current effluent limitation) x (current permitted total flow rate) =
(6900 ug/L) x (23.25 MGD) x 0.00834 = 1338 lbs/day
- MER difference =
(Current MER) - (Previous MER) =
1338 lbs/day - 1160 lbs/day = 178 lbs/day

- Increment Change in Arsenic water quality =
(MER difference) / [(effluent flowrate) +(diluting ocean water “flowrate”)] =
(178 lbs/day) / [(23.25 MGD + 5510.25 MGD)(0.00834)] = 3.9 ug/L

where Ocean water “flowrate” =
(Effluent flowrate) x (initial dilution factor) =
23.25 MGD x 237 = 5510.25 MGD

- Increment water quality change as a percentage of the water quality objective =
3.9 ug/L / 32 ug/L x 100% = 12.2 %

The example calculations illustrate that if the actual existing water quality for arsenic in the receiving water is better than the daily maximum WQO of 32 ug/L, then the water quality will be lowered by 3.9 ug/L for arsenic, or 12.2 % of the WQO. This lowering of water quality is not expected to be significant and is not expected to cause adverse effects to the overall receiving water. Furthermore, the example calculations assume that the effluent will contain arsenic at the concentration of the effluent limitation, whereas historical effluent data for the discharge through the SEOO indicate that concentration of constituents listed under Table B of the Ocean Plan in the effluent discharged are considerably lower. For these reasons, the Regional Board has determined that an antidegradation analysis is not required to consider the possible impacts resulting from the recalculation of initial dilution factor and consequent relaxation of effluent limitations.

The recalculation of Dm also indicated that the zone of initial dilution (ZID) expands to 41 feet from the outfall diffuser. The ZID is recognized as the mixing zone in the receiving water where water quality objectives may be exceeded however adverse effects to the overall receiving water body must be prevented. The computer model results indicate that a lowering of water quality may occur in the area 5 feet to 25 feet from the outfall diffuser by an increment not greater than 100% of the WQO for a given constituent and by an increment not greater than 30% of the WQO in the area 25 feet to 41 feet from the outfall diffuser. As examples, where arsenic concentrations 20 feet from the diffuser were previously predicted to be 170 ug/L, concentrations are now expected to be 200 ug/L, and where arsenic concentrations 35 feet from the diffuser were predicted to be 30 ug/L, concentrations are now predicted to be 40 ug/L. In addition to being spatially limited, the incremental lowering of water quality in the ZID is expected to be temporally limited because, as explained previously, the concentrations of a given constituent in the effluent discharged through the SEOO have historically been considerably lower than the effluent limitations except for exceptional circumstances of short-term duration. For these reasons, the lowering of water quality within the ZID is not expected to be significant and is not expected to cause adverse effects to the overall receiving water; therefore, the Regional Water Board has determined that an antidegradation analysis is not required to consider the

possible impacts resulting from the recalculation of the initial dilution factor and expansion of the ZID.

57. The following changes to Section VI.B *Effluent Monitoring* on page F-26 of Attachment F have been made:

Order No. R9-2005-0100 does not require monitoring for acute toxicity ~~and requires chronic toxicity to be monitored monthly~~, otherwise all effluent monitoring requirements from Order No. 99-71 are retained by the MRP (Attachment E) No. R9-2005-0100.

58. The following changes to Section VI.C *Whole Effluent Toxicity Testing Requirements* on page F-26 of Attachment F have been made:

The Discharger shall conduct chronic toxicity testing on 24-hour composite effluent samples collected at Effluent Monitoring Station M-001, as defined in Section II of the MRP (Attachment E), on a quarterly ~~monthly~~ frequency.

After the screening period, the most sensitive test species shall be used for the quarterly ~~monthly~~ testing.

59. The following changes to Section VI.D.1 *Surf Zone Water Quality Monitoring* on page F-27 of Attachment F have been made:

To assess bacteriological conditions in areas used for body contact activities and to assess aesthetic conditions for general recreational uses, Monitoring and Reporting Program (MRP) No. R9-2005-0100 requires that total and fecal coliform and enterococcus bacteria be monitored at a minimum frequency of once per week ~~from May 1 through October 31, and at a minimum frequency of once every other week from November 1 through April 30 of each year~~ at the 7 surf zone locations.

For the sample period of 2003 through August of 2004, no samples collected at any of the seven surf zone water quality monitoring stations showed bacteria levels that exceeded water quality objective of the Ocean Plan. Surf zone monitoring station S-6, located at the mouth of the San Elijo Lagoon, consistently showed measurable levels of total and fecal coliform and enterococcus, whereas bacteria levels at other surf zone stations were typically non-detect or very low.

For this reason, surf zone monitoring station S-6 has been made historical. Surf zone monitoring station S-8, 8,000 feet north of the outfall, has been created for this Order.

~~MRP No. R9-2005-0100 increases the overall sampling frequency from Order No. 99-71, otherwise, Order~~ No. R9-2005-0100 ~~and its MRP (Attachment E) No. R9-2005-0100~~ retain the requirements of Order No. 99-71 for surf zone water quality monitoring.

60. The following changes to Section VI.D.2 *Near Shore Water Quality Monitoring* on page F-27 of Attachment F have been made:

~~MRP No. R9-2005-0101 only alters the sampling frequency from Order No. 99-72, otherwise, Order~~ **No. R9-2005-0100** and **its** MRP (**Attachment E**) **No. R9-2005-0101** retain the requirements of Order No. 99-~~71~~ **72** for near shore water quality monitoring.

61. The following changes to Section VI.D.3 *Off Shore Water Quality Monitoring* on page F-27 of Attachment F have been made:

~~MRP No. R9-2005-0100 only alters the sampling frequency from Order No. 99-71, otherwise, Order~~ **No. R9-2005-0100** and **its** MRP (**Attachment E**) **No. R9-2005-0100** retain the requirements of Order No. 99-71 for off shore water quality monitoring.

62. The following changes to Section VI.E.1 *Benthic Monitoring* on pages F-27 and F-28 of Attachment F have been made:

To assess the status of the benthic community and to evaluate the physical and chemical quality of sediments in the receiving water, Order No. R9-2005-0100 requires the following **intensive** monitoring during **the 12-month period beginning November 1, 2008 through October 31, 2009. Results must be submitted by December 10, 2009.** ~~first and third years of the Order.~~

- a. Sediment Characteristics. Analyses shall be performed on the upper two inches of sediment core samples in accordance with the following schedule:

Table 16. Sediment Monitoring Requirements

Determination	Units	Type of Sample	Minimum Frequency
Sulfides	mg/kg	core	<u>Semi-annually</u> <u>Years 1 & 3</u>
Total Chlorinated Hydrocarbons	mg/kg	core	<u>Semi-annually</u> <u>Years 1 & 3</u>
BOD ₅	mg/kg	core	<u>Semi-annually</u> <u>Years 1 & 3</u>
COD	mg/kg	core	<u>Semi-annually</u> <u>Years 1 & 3</u>
Particle Size Distribution	mg/kg	core	<u>Semi-annually</u> <u>Years 1 & 3</u>
Arsenic	mg/kg	core	<u>Annually</u> <u>Years 1 & 3</u>
Cadmium	mg/kg	core	<u>Annually</u> <u>Years 1 & 3</u>

Determination	Units	Type of Sample	Minimum Frequency
Total Chromium	mg/kg	core	<u>Annually</u> Years 1 & 3
Copper	mg/kg	core	<u>Annually</u> Years 1 & 3
Lead	mg/kg	core	<u>Annually</u> Years 1 & 3
Mercury	mg/kg	core	<u>Annually</u> Years 1 & 3
Nickel	mg/kg	core	<u>Annually</u> Years 1 & 3
Silver	mg/kg	core	<u>Annually</u> Years 1 & 3
Zinc	mg/kg	core	<u>Annually</u> Years 1 & 3
Cyanide	mg/kg	core	<u>Annually</u> Years 1 & 3
Phenolic Compounds	mg/kg	core	<u>Annually</u> Years 1 & 3
Radioactivity	pCi/kg	core	<u>Annually</u> Years 1 & 3

- b. Infauna. Samples shall be collected with a Paterson, Smith-McIntyre, or orange-peel type dredge, having an open sampling area of not less than 124 square inches and a sediment capacity of not less than 210 cubic inches. The sediment shall be sifted through a one-millimeter mesh screen and all organisms shall be identified to as low a taxon as possible. Monitoring shall occur during the 12-month period beginning November 1, 2008 through October 31, 2009. Results must be submitted by December 10, 2009. ~~Sampling shall consist of 3 grab samples per year taken during years 1 and 3 of the Order.~~

Table 17. Infauna Monitoring Requirements

Determination	Units	Minimum Frequency
Benthic Biota	Identification and enumeration	3 grabs <u>semi-annually</u> years 1 & 3

~~If the discharger does not comply with effluent limitations of the Order, the Regional Water Board may require the discharger to perform the sediment monitoring, described above, on a year-round basis during the term of Order No. R9-2005-0100.~~

~~MRP No. R9-2005-0100 only alters the sampling frequency from Order No. 99-71, otherwise, Order No. R9-2005-0100 and its MRP (Attachment E) No. R9-2005-0100 retain the requirements of Order No. 99-71 for benthic monitoring.~~

63. The following changes to Section VI.E.2 *Demersal Fish and Macroinvertebrate Monitoring* on page F-29 of Attachment F have been made:

~~Order No. R9-2005-0100 requires the Discharger to establish a 30-meter band transect on the ocean bottom, within the receiving waters. During 12-month period for first and third year of Order No. R9-2005-0100, the Discharger must perform a survey of demersal fish and macroinvertebrates within the transect. If the Discharger does not comply with effluent limitations of the Order, the Regional Water Board may also require the Discharger to perform this monitoring, one time each year during the term of Order No. R9-2005-0100.~~

~~MRP No. R9-2005-0100 only alters the sampling frequency from Order No. 99-71, otherwise, Order No. R9-2005-0100 and its MRP (Attachment E) No. R9-2005-0100 retain the requirements of Order No. 99-71 for demersal fish and macroinvertebrate monitoring. Monitoring shall occur during the 12-month period beginning November 1, 2008 through October 31, 2009. Results must be submitted by December 10, 2009.~~

64. The following changes to Section VI.E.5 *Intensive Monitoring* on page F-29 of Attachment F have been made:

The Discharger shall perform the intensive monitoring as described by ~~the~~ MRP ~~No. R9-2005-0100 for years 1 and 3~~ of the Order during the 12-month period beginning November 1, 2008 through October 31, 2009 and participate in the Southern California Coastal Water Research Project (SCCWRP) Bight Study ~~in year 5 of this Order.~~ Results of the intensive monitoring must be submitted by December 10, 2009.

65. Section VI.E.6 *Plume Tracking Study* on page F-29 of Attachment F has been deleted.

66. The following addition to Section VII.B.2.b *Treatment Plant Capacity* on page F-30 of Attachment F has been made:

The treatment plant capacity study required by Order No. R9-2005-0100 shall serve as an indicator for the Regional Water Board the regarding Facility's increasing hydraulic capacity and growth in the service area.

67. Section VI.E.7 *Urban Runoff Diversions* on page F-30 of Attachment F has been deleted.

68. Section VII.B.2.g *Urban Runoff Diversions* on page F-31 of Attachment F has been deleted.

69. Section VII.B.2.h *Plume Tracking Study* on page F-31 of Attachment F has been deleted.

70. The following changes to Section VIII.A *Notification of Interested Parties* on pages F-34 of Attachment F have been made:

Notification was provided through publication in the North County Times on May 6 ~~April 8~~, 2005 and by letter mailed to interested parties on May 6 ~~April 8~~, 2005.

71. The following changes to Section VIII.B *Written Comments* on pages F-34 of Attachment F have been made:

To be fully responded to by staff and considered by the Regional Water Board, written comments should be received at the Regional Water Board offices by 5:00 p.m. on ~~June 1 May 4~~, 2005.

72. The following changes to Section VIII.C *Public Hearing* on pages F-34 of Attachment F have been made:

Date: ~~June 8 May 11~~, 2005
Time: 9:00 am
Location: ~~Regional Water Quality Control Board City of Laguna Beach~~
~~Regional Board Meeting Room City Council Chambers~~
~~9174 Sky Park Court 505 Forest Avenue~~
~~San Diego Laguna Beach~~, CA

73. The following change to Section VIII.D *Waste Discharge Requirements Petitions* on page F-34 of Attachment F has been made:

Any aggrieved person may petition the State Water ~~Resources Control~~ Board to review the decision of the Regional Water Board regarding the final WDRs.